

LETTER OR RECOMMENDATION

I have known Medha Sagar as an undergraduate student in my capacity as an Assistant Professor at Indira Gandhi Delhi Technical University for Women (formerly Indira Gandhi Institute of Technology). I taught her 'Introduction to Programming' and 'Algorithms Analysis and Design' during the second and fourth semester respectively. Apart from being her professor for two semesters, I was the project guide for her undergraduate thesis in her final year. All that to say, I have been associated with her for 6 years now and have closely observed her intellectual growth during this period. It gives me immense pleasure to write to you about Medha – a bright student with great potential of growth.

Throughout her undergraduate studies, Medha had shown immense technical curiosity and strong absorptive capacity to learn new technical concepts. During her first year, I witnessed her invest diligent efforts to learn Programming - a subject that was completely new to her. I recall that a key milestone in her learning path was the technical workshop at the end of first year at the university. As part of the workshop, all participants (more than 12 teams) were assigned a capstone project and Medha's team was tasked to develop a collaborative learning platform for facilitating technical discussions among students and faculty within the university. She worked cohesively along with her team, under my supervision, and was responsible for database management and designing user interface. Despite being the youngest team in the competition, their portal bagged the 'Best Project Award', and was consequently implemented in the university to be used as a discussion platform by teachers and students of my department.

As Medha's mentor during her final year of college, I marveled at the wide-ranging skill set that she has developed since our first class in her second semester. During the final year project, Medha worked on two different problem statements associated with E-Learning and Artificial Intelligence. For her first project, Medha took up the challenge of solving set-theory word problems programmatically- an ambitious project requiring not only proficient analytical skills but also a strong grasp of technologies involved. Medha ventured out of her comfort zone and employed subjects outside of standard curricula such as Machine Learning and Natural Language Processing to complete the first phase of her research.

While supervising her for the second phase of final year project, I was impressed with her research skills and her ability to come up with creative solutions for everyday problems. In her final year, she was selected as a teaching assistant in the 'Algorithms Practical Lab' for the class of 2014. Her success in this endeavor was largely due to her inherent ability to adapt her teaching style to the students' requirements and intellectual level. She mentored and taught students how to implement various types of algorithms with pertinent data structures. She leveraged this opportunity and identified the problems associated with evaluating students based on their programming proficiency. Showing a keen interest in addressing problems affecting her classmates, she worked on predicting students' programming performance and carried out extensive statistical analysis to come up with actionable insights that could help improve the existing learning paradigm. Both of her researches were later published in reputed international papers and her undergraduate thesis was selected as third best out of 33 research theses at the University.

I want to move away from projects as I end this letter and highlight few personality traits that I think sets Medha apart. She has *learned* to multitask, she establishes her priorities with clarity and executes on them. While researching for her final thesis, Medha was also interning. And despite competing priorities, she never missed a discussion and never showed any tardiness. Rather than remain confined to academic work, Medha took up leadership roles as well as projects which initially impacted her academic performance. But through perseverance and hard-work, Medha learnt to prioritize and showed great improvements in her academic performance in the consequent semesters. This understanding of judiciously balancing work and extracurricular activities will serve her well in future.

Outside the classroom, Medha was a proactive member of Espectro, an annual technical event organized by the department. She was the Class representative and Placement Coordinator for the class of 2016 and demonstrated great interpersonal skills when working with recruiter's representatives. To add to her achievements, she also holds the record for securing the highest number of placements for an individual student for the class of 2016 across all departments. Medha is a skilled communicator and presenter and can translate her ideas into words in an effective and coherent manner. She authored two papers under my guidance, and her refinement in terms of academic writing was laudable. Her linguistic proficiency will complement her technical skills as she associates with research personnel from diverse backgrounds in future.

Given my critical appraisal of her sterling qualities as a student and researcher, I highly recommend Medha to your graduate program, confident that she will establish high benchmarks of performance in her academic endeavors and make us all proud of her. If you require any further information, I will be happy to provide it. I wish Medha well in all her future ventures.

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